



MAY 30, 2025
University of Ottawa Heart Institute

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#### **WELCOME**

On behalf of the planning committee, it is with great pleasure that we welcome you to the 37th Ottawa Region Cardiovascular Research Day. This event is open to all cardiovascular research groups in the Ottawa region and is designed to give trainees an opportunity to showcase their outstanding projects and network with investigators and peers.

This year we have returned to a one-day, in-person program to facilitate participation from clinical and basic research teams.

This year, our keynote lecture will be led by Dr. Leo Anthony Celi, MD, MPH, MSc. Dr. Celi is a critical care physician and internationally renowned senior research scientist from the Massachusetts Institute of Technology. He has built impactful research platforms which improve patient outcomes through health informatics. Importantly, his innovations are accessible and widely shared among the global research community including low- and middle-income countries.

With 11 abstract talks and 95 posters, we are confident the Ottawa Region Cardiovascular Research Day is a great venue to network with colleagues and learn more about the work being done in the region. The event will conclude with an awards ceremony to recognize the best posters and oral presentations.

The Innovation Award Competition this year will feature 4 pitches. The award recognizes innovative ideas and trainees' ability to effectively communicate to a lay audience. Attend to hear your colleagues pitch their work to a panel of innovation champions!

### Other award presentations include:

- · Ottawa Region's Cardiovascular Trainee of The Year Award
- · Equity, Diversity & Inclusion (EDI) in Research
- · Dr. Frans Leenen Trainee Award for Publication Excellence

Be sure to join our Networking Social Event to connect and foster possible future collaborations.

Finally, we would like to thank our speakers, presenters, judges, session chairs, and organizers for making this event possible. We would also like to extend our gratitude to all sponsors for their generous support: **Silver Level Sponsor:** ThermoFisher Scientific; **Gold Level Sponsors:** Pfizer Inc, Capital Bioventures, **Platinum Level Sponsors:** Novo Nordisk and the UOHI Foundation.

Sincerely,

lan Paterson, MD; Wenbin Liang, MD, PhD Chair, Research Day Committee Co-Chair, Research Day Committee



## PLANNING COMMITTEE

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**OHEART COMMITTEE** 

OFFICE OF RESEARCH SERVICES



# OTTAWA CARDIOVASCULAR RESEARCH DAY 2025

Friday, May 30th, 8:00am-17:30pm

#### **Opening Remarks**

Ian Paterson, MD

Chair, Research Day Committee

8:00-8:15

Katey Rayner, PhD
Chief Scientific Officer /
VP Research, UOHI

8:15-9:15

**Oral Presentation Session 1** 

Moderator: Nadya Morrow, PhD Candidate

Theme: Innovative Approaches to Managing and Reducing Cardiac Risk Auditorium (H-2367)

O-1: Postoperative Inflammation Impairs Reverse Cholesterol Transport, Potentiates Foam Cell Formation, and Fuels Plaque Necrosis

Dominique Boucher, MD/PhD Candidate, UOHI Supervisor: Mireille Ouimet, PhD

O-2: Improving ECG Arrhythmia Detection with Pretrained Deep Learning Models

Humza Iqbal, BSc Candidate, University of Ottawa Supervisor: Christopher Sun, PhD

O-3: Decorin-Enriched Extracellular Vesicles Prevent Atrial Fibrosis

Simran Rakhra, MSc Candidate, UOHI Supervisor: Darryl Davis, MD

O-4: The Long-term Effects of High-intensity Interval Training and Moderate-to-vigorous Intensity Continuous Training on Functional Capacity and Quality of Life in Patients with Permanent or Persistent Atrial Fibrillation

Matheus Reis Hausen, PhD, Postdoctoral Fellow, UOHI Supervisor: Jennifer Reed, PhD

9:15-9:45

Trainee of the Year Lecture & Award Presentation

(Auditorium H-2367)

9:45-10:00

Health Break / Poster Hall

10:00-10:15

**EDI In Research - Trainee Award Presentation** 

(Auditorium H-2367)

Keynote Lecture Leo Anthony Celi, MD, MPH, MSc

10:15-11:15

Clinical Research Director, Senior Research Scientist, MIT Associate Professor, Harvard Medical School Staff Physician, Beth Israel Deaconess Medical Center

Is Al Worth Its Cost?

11:15-12:45

#### Poster Session & Judging Cardiac Rehabilitation Track (H-2330)

12:45-13:30

#### Lunch Auditorium (H-2367) OR

#### Mentorship Session with Leo Anthony Celi, MD, MPH, MSc

Registration required Executive Boardroom (H-2403)

**Oral Presentation Session 2** Moderator: Chanele Polenz, PhD, Postdoctoral Fellow

13:30-14:30

### Theme: Improving Cardiac Care & Outcomes

Auditorium (H-2367)

## O-5: Wnt5a Promotes Ventricular Tachyarrhythmias by Inducing Calcium

Jerry Wang, PhD Candidate, UOHI Supervisor: Wenbin Liang, MD, PhD

#### O-6: Radiomics Provides Incremental Value in Distinguishing Between ATTR and AL on Cardiac Magnetic Resonance Imaging

Bethlehem Mengesha, MD, Clinical Fellow, UOHI

Supervisor: Rebecca Thornhill, PhD

#### O-7: Effect of IGFBP7 on Cardiac/Renal Microvasculature in Diabetes Mellitus

Yiqing Huang, MSc Candidate, UOHI

Supervisor: Peter Liu, MD

#### O-8: Association Between Cardiogenic Shock Phenotypes and Outcomes: A Subgroup Analysis of the DOREMI Trial

Joshua McShane, MD, Resident, UOHI Supervisor: Pietro Di Santo, MD

14:30-14:45

Health Break / Poster Hall

14:45-15:30

#### **Oral Presentation Session 3**

Moderator: Lindsay Lew, PhD, Postdoctoral Fellow

#### Theme: Whole Person Heart Health Auditorium (H-2367)

#### O-9: Pre-existing Atherosclerosis Exacerbates Short- and Long-term Inflammatory Burden in Pneumonia

Cameron Stofts, PhD Candidate, UOH Supervisor: Katey Rayner, PhD

#### O-10: Menstrual, Reproductive and Menopausal Histories of Women with Cardiovascular Disease: A Cross-sectional Descriptive Study

Daria Goulets, BSc Candidate, UOHI Supervisor: Kerri-Anne Mullen, PhD

#### O-11: Exploring the Decisional Needs of African, Caribbean, and Black Patients Diagnosed with Brain-Heart Conditions

Semhal Gessese, MSc Candidate, University of Ottawa Supervisor: Krystina B. Lewis, PhD

15:30-16:15

#### **Innovation Award Finalists**

Auditorium (H-2367)

#### I-1: CCS Atlas - Making the Invisible, Visible

Marwan Bakr, BSc Candidate, UOHI Supervisor: Kyoung-Han Kim, PhD

**I-2: A New Hope For PAI-1 Deficiency** Serena Pulente, PhD Candidate, UOHI

Supervisor: Erin Mulvihill, PhD

#### I-3: Brain-Heart Matrix - Revolutionizing Drug Testing and Healthcare

Priyadharshni Muniyandi, PhD, Postdoctoral Fellow, UOHI

Supervisor: Peter Liu, MD

#### I-4: Repurposing a Game-changing Cancer Immunotherapy to Treat a Cancerlike Lung Vascular Disease

Elmira Safaie Qamsari, PhD Candidate, OHRI

Supervisor: Duncan Stewart, MD

16:15-17:00

#### **Networking Reception**

Cardiac Rehabilitation Track (H-2330)

#### **Awards Ceremony**

17:00-17:30

Moderator: Wenbin Liang, MD, PhD

Co-Chair, Research Day Committee Auditorium (H2367)

17:30

**Closing Remarks** lan Paterson, MD

Chair, Research Day Committee

Wenbin Liang, MD, PhD

Co-Chair, Research Day Committee